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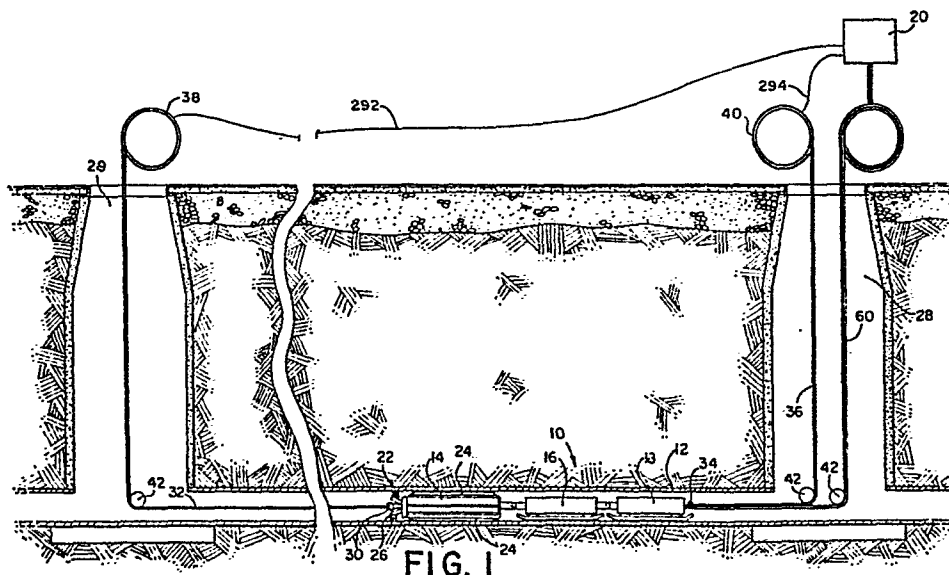
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54 Remotely controlled hydraulic cleaner apparatus.

57 A remotely controlled hydraulically operated cleaner apparatus (10) for use in cleaning the interior of a conduit or pipe (12) comprises a control means (20) located outside of the conduit (12) for generating control signals for controlling the operation of the cleaner apparatus (10). A source of pressurized hydraulic fluid (70, 52) is connected to valve means (90) for receiving and distributing hydraulic fluid in accordance with control signals received from the control means (20). The apparatus (10) further includes a housing (14) containing a hydraulically powered motor (144) adapted to receive hydraulic fluid from the valve means (90). An adjustable cleaner tool means (22) is provided for cooperating with

the motor (144) for rotation relative to the conduit (12), the cleaner tool means (22) being adjustable in order to maintain engagement with the interior walls of the conduit (12). The housing (14) is supported within the conduit (12) by an adjustable support means (24) and a hydraulically actuated means (134) is provided for receiving hydraulic fluid from the valve means (90) for adjusting the adjustable support means (24) to maintain the housing (14) generally radially centered within the conduit (12). In the presently preferred embodiment, the cleaner tool means (22) and the support means (24) are concurrently adjustable and cooperate to have the same relative outer boundary to engage the conduit (12).





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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	US-A-3 058 137 (DOYLE) * Whole document *	1,2,6, 8,9,11 ,12,13	B 08 B 9/02 B 08 B 9/04
A	US-A-3 267 504 (COOK) * Whole document *	1,2,5	
A	GB-A-2 094 926 (FRENCH) * Whole document *	1	
A	US-A-4 434 815 (FLAHERTY)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			B 08 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 02-10-1987	Examiner VOLLERING J.P.G.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			